

Title (en)  
BIAXIALLY ORIENTED, UV-STABILIZED, SINGLE OR MULTI-LAYER POLYESTER FILM WITH AT LEAST ONE-SIDED ANTIREFLECTION AND FLAME-RETARDANT COATING (ANTI-GLARE) AND A TRANSPARENCY OF AT LEAST 93.5%

Title (de)  
BIAXIAL ORIENTIERTE, UV-STABILISIERTE, EIN- ODER MEHRSCICHTIGE POLYESTERFOLIE MIT MINDESTENS EINSEITIGER ANTIREFLEX UND FLAMMGESCHÜTZTER-BESCHICHTUNG (ANTI-GLARE) UND EINER TRANSPARENZ VON MINDESTENS 93,5%

Title (fr)  
FEUILLE POLYESTER MONO OU MULTICOUCHE ORIENTÉ BIAXIALLEMENT, STABILISÉE AUX UV, POURVUE DE REVÊTEMENT ANTIREFLET ET IGNIFUGE (ANTI-ÉBLOUISSEMENT) AU MOINS D'UN COTÉ ET AYANT UNE TRANSPARENCE D'AU MOINS 93,5 %

Publication  
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Application  
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Abstract (en)  
[origin: US2020231772A1] A single-layer or multi-layer, biaxially oriented polyester film is provided bearing on at least one film surface a coating for transparency increase. The film has a particle fraction of not more than 0.5% and the coating is a dried water-based or solvent-based solution and/or dispersion having a dry coat thickness of 60-130 nm. The coating includes at least one acrylic acid-based and/or methacrylic acid-based polymer and at least one alkylphosphonate and/or oligo-alkylphosphonate. The coating has a refractive index  $n < 1.64$  and a phosphorus fraction of between 2 and 18%. The inventive film is suitable for producing greenhouse energy-saving sheets, particularly for the growing of plants with exacting light demands such as tomatoes. The film has specific transparency properties, high UV stability and good fire properties. The invention further relates to methods for polyester film production and also to the use thereof in greenhouses.

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